

09/920,898

PATENT  
Docket No.: ST01013USU(102-US-U1)

TO THE CLAIMS:

Please amend the claims as follows:

1. (previously presented) A wireless mobile terminal system comprising:
  - a GPS receiver;
  - a first antenna, coupled to the GPS receiver, for allowing the GPS receiver to receive GPS signals transmitted from at least one GPS satellite;
  - a wireless transceiver;
  - a second antenna, coupled to the transceiver, for allowing the transceiver to transmit signals and further for allowing the transceiver to receive signals;
  - a first coupling means, coupled to the transceiver, for obtaining a replica signal from the transceiver, the replica signal being a replica of a signal being transmitted by the transceiver;
  - a phase and gain adjusting means, with an input coupled to the first coupling means, for accepting and selectively conditioning the replica signal; and
  - a second coupling means, coupled to the output of the phase and gain adjusting means, for providing the selectively phase and gain adjusted replica signal to the GPS receiver, wherein the selectively phase and gain adjusted replica signal reduces interference between a transmitted signal from the transceiver and a signal received by the GPS receiver.

09/920,898

PATENT  
Docket No.: ST01013USU(102-US-U1)

2. (previously presented) The system of claim 1, wherein the first antenna and the second antenna comprise a single antenna.

3. (previously presented) The system of claim 1, wherein the phase and gain adjusting means uses a feedback loop to reduce the interference between the transmitted signal from the transceiver and the signal received by the GPS receiver.

4 - 6. (canceled)

7. (previously presented) The system of claim 3, wherein the feedback loop comprises a received signal strength indicator for controlling adjustment of the phase and gain of the replica signal.

8. (previously presented) The system of claim 3, wherein the feedback loop further comprises an adaptive circuit.

9. (previously presented) The system of claim 8, wherein the adaptive circuit minimizes long-term drift effects.

10. (currently amended) A method for reducing interference in a Global Positioning System (GPS) receiver that shares an antenna with a transceiver, comprising the steps of:

09/920,898

PATENT  
Docket No.: ST01013USU(102-US-U1)

replicating a first transmission of the transceiver, wherein the first transmission of the receiver emanates from ~~an antenna receiving GPS signals~~ the shared antenna;

coupling the replicated transmission into a front end of the GPS receiver; and

at least partially canceling ~~the first transmission~~ a GPS signal received by the GPS receiver using the replicated transmission.

11. (previously presented) The method of claim 10, wherein the at least partial cancellation is performed using a feedback loop.

12. (canceled)

13. (previously presented) The method of claim 10, further comprising phase shifting the replicated transmission.

14. (previously presented) The method of claim 13, further comprising amplitude shifting the replicated transmission.

15. (previously presented) The method of claim 14, further comprising controlling the phase shifting of the replicated transmission and the amplitude shifting of the replicated transmission by using a received signal strength indicator.

09/920,898

PATENT  
Docket No.: ST01013USU(102-US-U1)

16. (previously presented) The method of claim 10, further comprising minimizing long-term drift effects.

17. (original) The method of claim 16, wherein the minimizing of long-term drift effects is performed by an adaptive circuit.

18. (previously presented) The method of claim 10 comprising amplitude shifting the replicated transmission.

19. (previously presented) A wireless communication system comprising:

- (a) a wireless transceiver for receiving and transmitting communication signals;
- (b) a GPS receiver for receiving GPS signals; and
- (c) a feedback circuit for receiving a replica signal from the transceiver, the replica signal being a replica of a signal transmitted by the transceiver, for conditioning the replica signal, and for providing the conditioned replica signal to the GPS receiver as an interference cancellation signal.

20. (previously presented) The system of claim 19 wherein the feedback circuit comprises a gain adjusting component for adjusting the gain of the replica signal.

09/920,898

PATENT

Docket No.: ST01013USU(102-US-U1)

21. (previously presented) The system of claim 20 wherein the feedback circuit comprises a phase adjusting component for adjusting the phase of the replica signal.

22. (previously presented) The system of claim 21 wherein the feedback circuit comprises a receive signal strength indicator for controlling the gain adjusting component and the phase adjusting component.

23. (previously presented) The system of claim 19 wherein the feedback circuit comprises a phase adjusting component for adjusting the phase of the replica signal.

24. (previously presented) The system of claim 19 wherein the feedback circuit comprises a receive signal strength indicator for conditioning the replica signal.